

ABSTRACT

Methods and apparatus for an adaptive set management in a communication system are disclosed. Certain levels of an imbalance between a forward link and a reverse link are always present in a communication system. Although severe levels of an imbalance cause a detrimental effect on quality of communication and throughput, the imbalance is an issue only if it degrades throughput by one rate on the forward link. Consequently, an adaptive set management evaluates an imbalance among sectors in a subscriber station's list in accordance with the quality metric of the forward link and the reverse link, and removes from the subscriber station's list only a sector that causes severe imbalance. Although retaining a sector in the subscriber station's list may improve throughput, it may negatively affect other functions of the communication system, e.g., power control. Therefore, a method of power control is modified if a level of imbalance affecting the power control is detected.